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KNOWLEDGE

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OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

WHEN LIGHTNING STRIKES p. 4

U.S. ARMY

ARMY STRONG.

BAND OF BROTHERS & SISTERS

KNOWLEDGE

OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

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U.S. ARMY COMBAT READINESS/SAFETY CENTER

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Mission statement: The United States Army Combat Readiness/Safety Center (USACR/Safety Center) supports our Army by collecting, analyzing and communicating actionable information to assist Leaders, Soldiers, Families and Civilians in preserving/protecting our Army's combat resources.

We welcome your feedback. Please e-mail comments to **safe.knowledge@conus.army.mil**.

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After serving in this great Army of ours for more than 25 years, one thing has become clear to me: Soldiers keep making the same mistakes when it comes to their safety and well-being. There's no doubt the dedicated Soldiers who make up our Band of Brothers and Sisters work hard to fulfill their difficult missions. However, many of them play just as hard in their off-duty time, and that's where the vast majority of our accidents are happening.

RT SOLDIERS, SAFE SOLDIERS

The Soldiers we often see in accident reports, especially those involving privately owned vehicles, are young adults taking the same risks many of us did at their age, fueled by bravado and a sense of invincibility. But just because we were reckless once doesn't mean we should tolerate risky behavior from our Soldiers today. Leaders must be Leaders — we have to set the standard of responsibility, accountability and discipline for our subordinates. And when our Soldiers don't live up to these standards, it's our duty to both correct and mentor them as they find their way.

While this awesome job sometimes calls for us to be tough, we also have the opportunity to empower our Soldiers to make smart decisions for themselves. Over the years, I've learned that telling Soldiers what they can't do, especially in their off-duty time, is often counterproductive. It's nearly a given that many of our Soldiers are going to engage in high-risk activities when they're not at work. We know this, and we must embrace the fact and move forward — not with the intent to stop them, but rather to help them understand how they can participate in these activities safely.

Our Army is realizing this concept through the Warrior Adventure Quest program, which has taken Soldiers on high-adrenaline recreational activities such as mountain biking, whitewater rafting, rappelling and caving in a safe, education-centered environment. As dwell time between combat tours increases, Leaders will need to find creative ways to incorporate similar programs and other educational and teambuilding initiatives like intramural sports into their training schedules. These positive pursuits build stronger and safer Soldiers by channeling their creative energy toward hobbies that fulfill twin goals of physical fitness and safety awareness.

This same creative energy is abundant in the videos submitted thus far during our second annual Peer to Peer Safety Video Competition, which runs through April 30. It's obvious from the videos we've received that our amateur moviemakers have had a lot of fun with the contest, and your Soldiers can too. As an added incentive, the top three entrants will share a prize purse of nearly $4,000 provided by the Better Opportunities for Single Soldiers program. Make a video, save a life and maybe make some money — it's really that simple. Contest rules and details are available on the USACR/Safety Center Web site (https://safety.army.mil), along with several innovative tools to assist you in developing and implementing safety and training programs geared toward your unit's needs.

Please stay hands-on and remember what's important — keeping those Soldiers you lead safe. I look forward to working with you, and thank you for all you do for our Band of Brothers and Sisters.

Army Safe is Army Strong!

MICHAEL EYER
Command Sergeant Major
U.S. Army Combat Readiness/Safety Center

WHEN LIGHTNING STRIKES

RETIRED MAJ. EMMA CLOPTON
Birmingham, Ala.

Spring is just weeks away and, as the weather gets warmer, most training activities will move outdoors. Numerous hazards are associated with outdoor training during the spring and summer months, most notably heat injury. Sometimes, however, Soldiers fall victim to a dangerous force of nature — lightning, which is just as lethal as heatstroke but much less predictable.

Of weather-related fatalities, only floods kill more people annually in the United States than lightning. According to the National Oceanic and Atmospheric Administration (NOAA), more than 400 people are stuck by lightning each year. About 60 of those strike victims die, and many more are left with permanent disabilities.

Although each of the U.S. armed forces usually reports some personnel- or equipment-related lightning strikes each year, the Army has the highest casualty rate. Military personnel, especially infantry and artillery Soldiers, are at risk for lightning injury and death due to the nature of their training and operational activities. Many of these activities take place outdoors in all types of weather and within lightning-prone areas such as the southern U.S. and the open deserts of Iraq.

Lightning-related incidents reported in the Army often involve a single strike that causes multiple personnel injuries. This is because exercises and operations frequently involve groups of Soldiers working as teams, and these clusters form a larger target. Examples of incidents where multiple injuries might result include lightning striking metal or wet equipment, flash lightning exploding from a target or lightning currents traveling along the ground.

Here are a couple of examples to illustrate this phenomenon. At Fort Irwin, Calif., three Opposing Force Soldiers were struck by lightning on a hilltop. Several years before that incident, eight Soldiers were injured at Camp Grayling, Mich., when lightning struck some trees 50 feet away. The Soldiers sought shelter under a tarp when the thunderstorm appeared and were hit when the lightning current traveled at ground level to their location. (For more examples, see the info box on page 6.)

There's no single action that eliminates the risk of lightning, but you can reduce your probability of being struck by following a few simple rules. For instance, avoid high-elevation areas, open fields, isolated trees, communication towers, flagpoles, open-top vehicles and water during thunderstorms. It

LIGHTNING BY THE NUMBERS

In 2008, 28 people in the U.S. died due to lightning strikes and hundreds of others were permanently injured. Of the victims who were killed by lightning in 2008:

- **100 percent were outside.**
- **79 percent were male.**
- **36 percent were males between the ages of 20 and 25.**
- **32 percent were under a tree.**
- **29 percent were on or near the water.**

For more information on lightning safety, visit the National Weather Service Web site at www.weather.gov/os/lightning/index.htm.

doesn't matter if the storm appears to be far away — thunder signals approaching lightning, and you should take cover as quickly as possible.

If a thunderstorm approaches and a building or closed-top vehicle isn't available, seek shelter under the smallest tree in a group of several large trees, but never under a single tree. Stay at least six feet away from the trunk to minimize the risk of a side strike. If you're caught in an open area without trees or other shelter, assume the lightning safety position: crouch with your feet as close together as possible with the heels together and place your hands over your ears. Do not lie flat on the ground!

If you're training or operating in the open and see lightning

DID YOU KNOW?

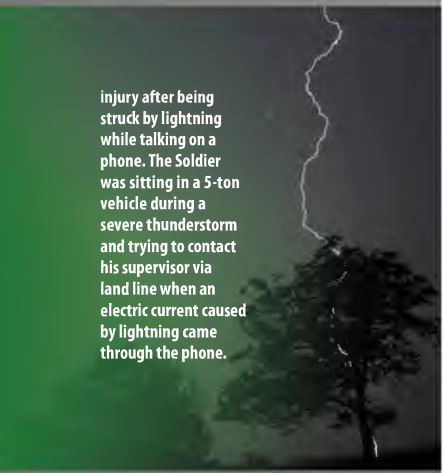
Since fiscal 2002, two Soldiers have died and at least 25 others were injured due to lightning strikes, including:

- **A Soldier was struck by lightning while erecting a tent that overturned during a storm. The Soldier was taken to a medical facility, where he later died. Four other Soldiers were also struck, but none were seriously injured.**
- **A Soldier was killed when lightning struck his tent while on a camping trip. Three other Soldiers onsite were not injured.**
- **Three Soldiers were hospitalized when lightning struck a nearby tree as they attempted to erect a shelter to keep their equipment dry during a field training exercise.**
- **Three Soldiers were hospitalized after lightning struck near their observation point.**
- **A Soldier suffered burns after he was struck in the head by a bolt of lightning. The Soldier was dazed but coherent after the strike and recognized what had occurred. The Soldier was checked for injuries by a medic before being transported to the emergency room.**
- **A Solider suffered burns to his body after being struck by lightning while walking across an airfield tarmac. The Soldier did not have a pulse and was not breathing when he was found by a civilian, who revived him.**
- **A Soldier suffered a head**

or hear thunder, use the "30/30 rule" to determine when to seek shelter. When you see lightning, count the seconds between the flash and thunderclap. If it's 30 seconds or less, seek shelter immediately. Then, wait at least 30 minutes after the last thunderclap before leaving your shelter. Don't be fooled by a blue sky, either. About 75 percent of lightning injuries occur very early or very late in a storm's life, and strikes have been recorded from as far away as 56 nautical miles.

Leaders play a vital role in preventing lightning casualties among their Soldiers. During outdoor training missions, they should designate a weather guard to alert personnel of impending bad weather. Leaders also must decide beforehand when to modify or suspend outdoor training and where to seek shelter in the event of thunderstorm activity.

No one can control the weather, but you can control your risk of becoming a lightning casualty. Spring and summer thunderstorms are just around the corner, so be prepared when lightning strikes.



injury after being struck by lightning while talking on a phone. The Soldier was sitting in a 5-ton vehicle during a severe thunderstorm and trying to contact his supervisor via land line when an electric current caused by lightning came through the phone.

WHAT DO YOU THINK?

From January through March, **KNOWLEDGE** magazine is conducting a survey to determine whether we're meeting our readers' needs. Please help us out by taking a couple of minutes to answer a few simple questions at https://safety.army.mil/.

After all, this is your magazine. Shouldn't it contain the information you find helpful?

THE ENTIRE CREW HAS A VOICE

CHIEF WARRANT OFFICER 2 BRADLEY D. KUHN
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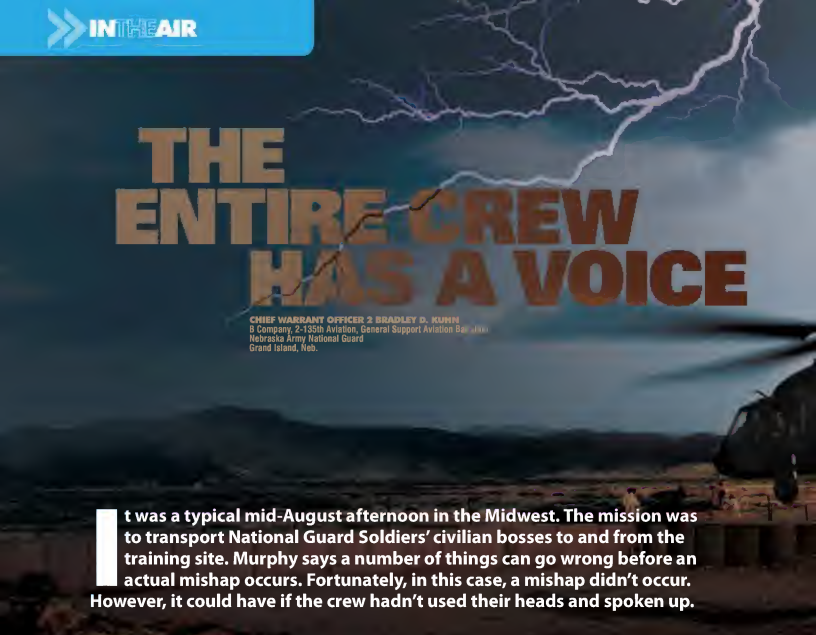

It was a typical mid-August afternoon in the Midwest. The mission was to transport National Guard Soldiers' civilian bosses to and from the training site. Murphy says a number of things can go wrong before an actual mishap occurs. Fortunately, in this case, a mishap didn't occur. However, it could have if the crew hadn't used their heads and spoken up.

The crew consisted of a 3,000-hour instructor pilot (IP), a roughly 300-hour pilot (PI) and two solid crew chiefs (FE) in the back. We were moderate on our risk assessment due to the IP being over the duty day. The mission was approved and we were on our way. The first three-quarters of the mission went flawless, aside from a few isolated thunderstorms, which wasn't unusual during the summer.

Our return flight to the training site was about a 200-mile trip. After paying for fuel, we checked the forecast on Weather Services International. There were two thunderstorms, one to the north and one to the south, located about midway from our trip. We talked as a crew and decided we could fly between them.

We took off at sundown and donned our night vision goggles. We could see lightning in the far distance, but we were well south of it. About midway through our flight, the storms started to converge on us. I gave flight watch a call, but there was no response. That's when I started looking for the nearest airport to land. We found one about

10 miles from our present position. All the while, our crew kept weighing the options as to our best course of action. The storm got worse — so bad we could hear the lightning through our integrated communications system.

It was at this point we had to make a decision. We could keep on going, hoping our destination was clear, or we could land at the nearest airport, which was about 10 miles away. The IP thought the weather was clear to the west and we should continue our flight. The FEs thought we should land at the airport and let it pass for the simple reason we didn't know for sure how the weather was to the west. We took the most conservative response and decided to land. On a five-mile final, we finally reached flight watch. They couldn't believe we were flying in that mess.

The moral of the story is to take the most conservative response. Many pilots respect what their crewmembers have to say, but some don't. The truth is, FEs are on the aircraft, too, and their lives are dependent on the decisions of the pilots. They should have a voice in the decisions involving the aircraft and crew. I remember reading in Flightfax about the CH-47D that crashed several years ago, killing 18 people onboard and destroying the aircraft. That story came to mind because the crew was continuing visual flight rules into decreasing weather conditions, just as we were. Stop and think of the consequences of your actions and then make the smart decision.

If forecasted weather is bad, don't fly or wait for it to clear. If you encounter unforecasted weather during the flight, be willing to turn around and go back, or land and wait it out. Regardless, every crew needs to be trained, equipped and prepared to operate under instrument meteorological conditions. The time to find out you are not prepared isn't when you punch into the clouds.«

FIGHTING THE "Z" MONSTER

WARRANT OFFICER 1 WILLIAM VANDALSEM
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Summer is approaching and many of us will be hitting the road for a vacation or long weekend trip. However, all too often, in the process of seeking "fun" we also find fatigue. We've all driven when we were feeling tired — perhaps falling victim to a bad case of "get-home-itis." If you've ever been driving down the interstate on a long trip and suddenly realized you couldn't remember the last few (or many) miles, you've driven fatigued.

Most of us are aware of the hazards of fatigue, which include inattention, daydreaming and even falling asleep. Despite that, we often still continue driving. It's not that we deliberately engage in dangerous activities; rather, it's that we don't correctly assess the hazards.

How do we avoid setting up ourselves to be the victim of a fatigue-related accident? We've already begun the five-step composite risk management (CRM) process by identifying the hazards. Although we know falling asleep at the wheel is bad, we sometimes lure ourselves into a false sense of security by saying, "It won't happen to me." However, the following symptoms of fatigue — heavy eyelids, frequent yawning, drifting across road lines and driving erratically — are red flags that we're headed for trouble. Beyond that, fatigue can cause us to see "things" in the road (highway hypnosis), daydream or feel irritable or fidgety. The probability we'll experience these effects depends on the length of travel, time of day and the amount of rest we've had.

We need to counter these effects by moving to the second step of CRM — assessing the hazards. We need to realize fatigue often affects our driving ability long before we're aware of it. It is important to understand that because fatigue-related crashes are often quite severe, as drivers fail to react quickly enough — or perhaps at all — to avoid a crash.

The third step of CRM is to develop controls. This process doesn't have to be as bad as it may sound. Mostly, it's just using a little common sense. Here are some suggested controls:

- Ensure you get a good night's sleep before a trip.
- Take a break every two hours and get out of the car.
- Drive in shifts if you aren't alone.
- Plan to stay overnight if traveling for extended periods.
- Avoid driving if you're taking any medications that cause drowsiness.
- Avoid driving when you'd normally be asleep (late night and early morning).
- Adjust your seat so it's in a good, upright position.
- Don't drink and drive (let's not compound the problem).

Next, there is the fourth step of CRM — implementing the controls. How do you do that? First, be honest with yourself about your abilities. Don't try to convince yourself that you can "make it a little farther" if you're feeling any of the symptoms mentioned earlier. If you do, you're an accident waiting to happen.

Finally, there is the last step — supervise and evaluate. How do you supervise yourself? Ask yourself how well you handled being fatigued while driving? Were you willing to accept being delayed on your trip to ensure your safety and that of others on the road? And how do you supervise others? Make sure your fellow Soldiers, Family and friends understand the risks involved in attempting to drive fatigued. Take time to mentor the younger, less-experienced drivers you know.

While fatigue affects all of us, we don't have to let it turn us into an accident statistic. We can use CRM to reduce our risks, help keep others safe and drive safely on that long trip home.«

DYING TO TA

There is a term in the aviation community referred to as "get-home-itis." The most experienced aviators are often willing to compromise the safety of themselves and their crew to get home. They'll disregard lower weather minimums and other hazardous risks just to get home.

The same type of sentiment exists in the medical evacuation (medevac) world. We call this attitude "get-them-to-the-hospital-itis." Army aviators are highly motivated and skilled warriors with an important mission to accomplish. However, this same motivation can be a double-edged sword. A professional Soldier/aviator wants to succeed in all missions, especially if that mission is to save a life. At times, this determination can cloud one's judgment. In other words, if a combat medevac pilot can't take off immediately to pick up an injured Soldier, then the pilot feels that the fate of the Soldier rests in his hands. That first "Golden Hour" is a critical time for a severely injured Soldier. The following event happened to me.

It was 3 a.m. and the medevac alarm went off. I had only been asleep in my rack a couple of hours after working a 14-hour duty day. The staff noncommissioned officer (NCO) reported we had a critical patient who had been pinned between two Strykers. It's amazing how fast an adrenaline rush can get the blood pumping and bring someone from a dead sleep to full consciousness.

I'll bet I was fully dressed, to include flight vest, in less than three minutes. I was the pilot for that day, so my job was to get the weather briefing. The weather was at our minimum requirements. The illumination was about 3 percent. While the pilot in command (PC) got launch authority from the commander, I ran out to untie the rotor blade and proceed with the run-up. In total, we were off the pad in a minimum of time after the initial call.

We reached the patient's location within five minutes. On our low recon, we found the site dry and dusty. To make matters worse, we also discovered a tight spot to land with a substantial

KE OFF

CHIEF WARRANT OFFICER 2 ERIC JASON WILSON
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> "**BASIC** pilotage should have told me to **TRUST** my **INSTRUMENTS** and never fly **VMC** and **INSTRUMENT METEOROLOGICAL CONDITIONS** at the **SAME TIME.**"

upslope condition. As a crew, and with the PC's blessing, we determined this landing zone was far better than the other options. The medic sealed the deal when he said that time was a critical factor. The PC did a quick check of tabular data and confirmed we had more than 20 pounds of torque to play with. We used a high-angle-of-approach technique to stay above the dust cloud. Our landing was successful, and the dust cloud enveloped us just as the skids hit the ground. We weren't so lucky with our takeoff a few minutes later.

After loading the patient and performing before-takeoff checks, we conducted a normal visual meteorological condition (VMC) takeoff. As soon as I pulled the collective, the helicopter was engulfed in a dust cloud. We couldn't see anything, so I lowered the collective to the full-down position. That is when the "get-them-to-the-hospital-itis" syndrome set in because we knew the Soldier in the back had serious injuries.

With little time, we decided an instrument takeoff was the best option. The PC began to call out the torque as I made a steady pull on the collective. We were immediately engulfed in dust again as we started up. The crew chief called out, "We're drifting aft, drifting aft, drifting aft!" At that point, I made a significant forward input to the cyclic. Not more than two seconds later, we were out of the dust cloud and on our way to the hospital.

It wasn't until the after-action report that we realized the seriousness of that situation. Basic pilotage should have told me to trust my instruments and never fly VMC and instrument meteorological conditions at the same time. We discussed this issue at the next pilot's call, and a crewmember made a comment about a common technique that some instructor pilots were using. He said because dust is accentuated under goggles, simply turning off the position lights would lessen the appearance of the dust cloud. None of us seemed to know this; however, on the next flight, we tried it and it worked. The dust was a lot lighter. Simple solutions like this aren't always in "the books." That's why we need to share our lessons learned.

Little THINGS COUNT

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I've been told many times in my Army aviation career that "it's the little things that will come up and bite you." While this bit of advice has served me well throughout my career and life in general, an accident that happened to a fellow aviator several years ago really drove this point home.

The Soldier, an experienced Army National Guard aviator and pilot for the state police, had just completed a Fourth of July flyover in an OH-58C that lasted less than two hours. After the flight, he left on his motorcycle to ride the 50 miles to his residence to partake in Independence Day activities with his Family.

The Soldier, an experienced and qualified motorcyclist, changed out of his flight suit and into civilian clothes. He then donned all of the required personal protective equipment, including a Department of Transportation (DOT)-approved full-face helmet, leather boots, gloves and jacket. He used bungee cords to secure his backpack, which contained his flight suit and other items, onto the seat of his Kawasaki sport bike. He then set out for home, but only made it eight miles before a bizarre accident dramatically and permanently changed his life.

I was assigned as the line of duty (LOD) investigating officer for the investigation into his motorcycle accident. I initially heard he was in a coma in our local medical center's intensive care unit. After receiving the LOD assignment, I began the investigation by visiting the hospital to check on the Soldier's condition and learn the details of his accident.

At the hospital, I found out he'd suffered a substantial traumatic brain injury (TBI) and was being kept in an induced coma to reduce brain swelling. His other injuries included a fractured wrist, lacerations, contusions and some slight road rash. None of the injuries, except for the TBI, was potentially life threatening. He was kept in the induced coma for 26 days after the accident.

I continued gathering information by interviewing the investigating police officer, who provided me with a copy of the Soldier's accident report. I also interviewed the sole witness to the accident who, by chance, happened to be a registered nurse. She had been on her way home from work when the accident occurred and provided medical assistance to the Soldier until paramedics arrived.

The investigating police officer estimated the Soldier had been traveling about 70 mph in a 65-mph zone on a four-lane divided highway when the accident occurred. He determined the accident resulted from the Soldier's backpack rotating down into the motorcycle's rear wheel while he was passing the nurse's vehicle. The backpack jammed the motorcycle's rear wheel, causing the Soldier to be

vaulted off his bike. The police officer also told me he found the Soldier's helmet, with the chin strap still secured, lying next to the guardrail.

The nurse told me she was traveling the speed limit when the Soldier slowly passed her on the left. When he attempted to return to the right lane, it appeared to her the motorcycle's rear wheel hit an imbedded reflector in the center of the roadway. This, she believed, caused the Soldier to lose control and be catapulted from his motorcycle. She described him as looking like a "rag doll" bouncing down the highway. She saw his helmet hit the road once and then separate from his head. Then she saw the Soldiers' head, now minus the helmet, hit the road a second time before he came to rest.

After he'd been brought out of his induced coma, the Soldier was transferred to a rehabilitation hospital, where he began his long journey of recovery. Because of the severity of his TBI, he was never able to regain flight status in either the military or state police. He has since left the Army National Guard, but is still currently working ground duties with the state police.

What events led to the Soldier's motorcycle accident and the TBI that altered his life forever? Two "little things" were identified. One was the backpack he had bungee corded to the back of his seat, which rotated into his rear wheel and caused it to lock up. The other was the failure of his helmet to remain on his head during the accident. Was it haste, mechanical problems or just the wrong equipment for the job that caused these failures? Possibly all three, but most likely it was attention to detail — the "little things" — that initiated this accident's chain of events. If the backpack had been better secured to the motorcycle or had he used other means, such as saddle bags, to carry his gear, the accident probably wouldn't have happened. If his helmet, which was a quality DOT-certified piece of equipment, had remained on his head during the crash, he probably would not have suffered TBI. Was the chin strap secured tightly enough or was there a design flaw in the way the chin strap was constructed? All that is known for sure was that the Soldier was wearing the strap when the accident occurred.

This Soldier lost his flying career and could have died because "little things" comprised a chain of events that resulted in this accident and his injuries. The "little things" he overlooked had a huge impact on his life. How about you? When it comes to your safety, are you overlooking the "little things"?

back on the track

1ST LT. ERIK JOHNSON
210th Military Police Battalion
Michigan Army National Guard
Lansing, Mich.

What's the first thing you think when you see a former infantry sergeant sitting at a MILPO desk typing up personnel actions? That's right, "Bum knee."

Knee injuries are a common problem for all Soldiers, not just infantrymen. Day-to-day physical training puts stress on our knees, so we must take care of them. After all, if we're going to "run, run, run till the day is done," we should understand it will be the knees — our body's natural shock absorbers — that will carry us along.

Even paved roads have potholes, pebbles and other potential tripping and twisting hazards. Therefore, it should be expected that some Soldiers will, on occasion, injure a knee while running. Of course, a knee can be injured while performing any of the myriad tasks associated with soldiering.

Some symptoms of an injured knee are nearly universal. Pain, swelling and stiffness are commonly experienced; but victims of a knee injury may experience additional symptoms. For instance, the knee may "lock up." This occurs when loose pieces of cartilage reside in the knee. An injured Soldier may also feel and hear a grinding/crackling sensation. Such episodes are generally caused by the presence of torn cartilage or rough bone in the knee.

Should you notice any of these symptoms in your own knee, get to sick call and a doctor immediately. Waiting can only allow the problem to get worse. The doctor will explain the problem to you and guide you in how to resolve it. In addition, he will help you prevent further injury to your knee.

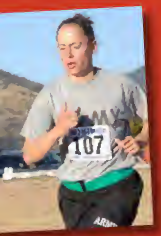
The following are three common knee injuries that plague Soldiers both at home and abroad:

Runner's Knee

When a Soldier is suffering from runner's knee, the smooth cartilage underneath the kneecap has been damaged. This condition starts as a softening of the cartilage within the knee. Gradually, wear and tear on the cartilage will cause it to roughen and crack. Pain, swelling and, perhaps, a grinding noise will result. This condition often develops over time due to repetitive force movements associated with running.

If you believe you are suffering from the early stages of runner's knee, you should limit the amount of stress you put on this area to allow time for healing. While your knee is healing, it's crucial you to avoid running downhill. Exercises that are performed with a bent knee should also be avoided. There

DID YOU KNOW?



Whether you're new to running or just getting back into a routine after a winter layoff, Military.com recommends the following tips:

- **Stretch for a week to loosen up stiff joints and connective tissue.**
- **Choose a nonimpact aerobic activity like biking, elliptical gliding, rowing or swimming to do when injuries are first felt. It is never a bad idea to cross-train in any of these activities every other day in place a running.**
- **Warm up properly and then stretch. Run nice and easy for about 5-10 minutes, then stretch once you are warm and the muscles and joints are more pliable. Never stretch "cold."**
- **Replace running shoes often.**

For more information on preventing running injuries, visit http://www.military.com/military-fitness/running/preventing-running-injuries.

are some exercises that can help rehabilitate a knee, but you should always consult a doctor first to prevent causing further damage.

Meniscus Tear

Meniscus cartilage bears the weight of the body above the knee. If a Soldier is bending low to pick up a heavy object, the meniscus will carry the weight of the body plus that of the object being lifted. Repeating this motion day after day puts a Soldier at risk for a meniscus tear.

Pain, swelling and a locking of the knee may result from a meniscus tear. A "clunking" sound from the knee may also be heard. A meniscus tear should be treated by a doctor before it degenerates into arthritis.

Knee Sprain

Ligaments in the knee may stretch due to a twisting action or similar injury. This stretching often results in a mild sprain. Of course, there will be some pain felt, as would be associated with any sprain, mild or severe. Swelling may also occur. A mild sprain might even cause the knee to feel unstable as you try to walk.

A severe sprain is the result of a torn ligament. Any violent injury can potentially cause a severe sprain. Pain and swelling will quickly appear, and expect the knee to become unstable. The most important thing to remember about all knee injuries is to seek medical attention immediately. Otherwise, your condition could deteriorate into a more permanent injury.

Time to Heal

During the time your knee is healing, perform only those exercises suggested by your doctor. Follow those instructions carefully. Begin the recovery regimen with gentle exercises. Starting out too hard too soon can only worsen your injury. You may move up to more challenging exercises as you regain strength.

Be sure to check with your doctor regarding any pain or swelling that won't go away. Most importantly, use the medicine prescribed by your doctor only as directed. Do not make the mistake of misusing a prescription to cloak pain during physical activity, as this will likely result in you aggravating your injury. What's worse, you'll have to face the aggravation of

FYI

Leaders are in the best position to prevent injuries. The Injury Prevention Through Leadership Course is entertaining and engaging and provides concise, evidence-based information and guidance Leaders can use to prevent many injuries. The one-hour, interactive online course teaches practical strategies to help Soldiers meet their fitness goals. Visit Combat Readiness University II at https://crc.learn.army.mil. Log in with your AKO ID and password, select the Courses tab, open the Joint Forces Safety Training folder and enroll today.

your first sergeant when you explain to him why your recovery schedule has been extended by several weeks. Good luck with that!

The goal is to get your knee back into shape before returning to running or any other strenuous exercise. The ultimate rule, however, is to always follow the instructions of your doctor, whose objective is to return you to health and duty. It's your duty to follow the doctor's orders. Doing so can help get you back on the track in no time.«

What Was I Thinking?

CHIEF WARRANT OFFICER 2 CHRISTOPHER L. HOLSINGER
Eagle Army Airfield
Wonju, Korea

I was in my second deployment to the sandbox, but this tour was much different from the last. Although it was still just as hot and gritty, the flying tempo was definitely at a higher pace and we were doing a lot more with a lot less. I remember my boss saying we would probably go to war with the Army we have and not the Army we want. And, we did.

As I was walking back from the aircraft after my 13th consecutive day of flying, I got the infamous, "Hey you." I was handed a kneeboard packet and told we were picking up some Soldiers who had been put in the night before. I turned on my flashlight, did an about-face and thought there must have been a mistake as I skimmed over the packet. The orders declared the air mission commander as the pilot in command (PC) and I was his co-pilot. Anticipating my anxieties about this flight, he reassured me that this was a simple mission. We would be Chalk 4, following three other aircraft to the landing zone (LZ) to pick up the guys and drop them off at their forward operating base. Too easy.

Buoyed by my fortitude to never decline a mission, I agreed against my better judgment to make this trip even though I was exhausted. The crew briefing and aircraft pre-flight procedures were completed. However, I wanted more details for this operation, so I tried looking at postage-stamp-size black and white pictures of the LZ. The imagery looked as if clipped from an outdated newspaper. I laughingly remembered overhearing an experienced pilot say, "If all else fails, just fly to grid and land."

We started the aircraft and, as promised, we were Chalk 4 out the gate. A few minutes later, we were on the downwind expecting a right turn, landing to the north. The PC was busy on the radio while I was playing "follow the leader." The global positioning system (GPS) looked about right and I saw the first aircraft start his approach to the ground, then the second and the third. They generated a huge dust cloud, and the winds from the west weren't helping me as we flew in a staggered-right landing formation. I tried to space off Chalk 3 and then looked at the GPS and noticed a signal from the ground unit awaiting pickup. That was nice, I thought, my own personal beacon. I spaced off

the troops on the ground to my right and Chalk 3 to my left as the crewmembers called me clear down to the ground. Other than not seeing much of the ground, all seemed well enough.

My rate of closure and decent appeared normal as the aircraft touched down. Before we fully stopped, I heard a loud pop and the aircraft lurched forward and the front end started to drop. I picked up to a hover and saw through my left chin bubble a ditch 2 feet wide and about 3 feet deep with my front landing gear laying in it. The PC took the controls and we assessed the condition of the aircraft. I remember looking into the ditch and wondering, "Why would you stage your ground troops beside a ditch, knowing you were going to be picked up by a helicopter?"

After assessing the aircraft damage, we deemed the aircraft flyable with only a minor hydraulic leak. I secured the utility hydraulics and the PC passed the controls back to me. He then coordinated with the ground unit that the passengers would have to board one of the other aircraft.

The PC and I discussed our new plan. We decided to fly the aircraft back to our point of origin and have maintenance create a makeshift landing area from pallets. We hovered for about 30 minutes while maintenance assembled the pad. This gave us time to discuss how we would shut down the aircraft and the possibility of it rolling over. The landing and shutdown went relatively smooth. After we departed the aircraft, I saw a few of the antennas crunched between the aircraft and pallets, but that was unavoidable.

Lessons Learned

Looking back, this incident is still vivid in my mind. Some have told me it's just the cost of doing business. This "business" cost us a Class C accident. Although no one was hurt and the aircraft was up and flying in just a few days, I couldn't help but ask myself, "What was I thinking?"

War is tough, uncompromising and unforgiving. For all Soldiers, the rigors of battle demand mental and physical toughness and close-knit teamwork. Between the anxiety of battle, we spend long hours doing routine but necessary tasks in cold, wet weather, moving from position to position, often without hot meals, clean clothes or sleep. The potential for breakdown in discipline is always present. In my case, fatigue combined with pressure felt to fly — either real or perceived — was a dangerous combination. I failed to admit to myself how exhausted I was and that everyone has limits. This demonstrates the importance of establishing firm personal limits for the go/no-go decision and then sticking with the decision once made.

I also fell into the complacency trap. I let down my guard by trusting the ground unit to guide me to a safe landing area.

Complacency probably is the biggest threat we face, even in combat, so we continually must be aware of its presence and strive to combat it effectively. The bottom line is that aviation is an unforgiving business, and a moment of inattention can lead to disastrous results.

WHERE WAS CRM?

CHIEF WARRANT OFFICER 4 JOEL GORDON
Detachment 51, Operational Support Airlift
Fort Lewis, Wash.

It was an average summer day in August 2008. I was halfway through my shift when the State Patrol Communications Center (SPCC) advised of a head-on collision involving injuries on a heavily traveled highway in northeastern Washington state. As a state trooper with the Washington State Patrol (WSP), I was quite familiar with the dangers associated with this two-lane road. I advised SPCC that I was en route and proceeded to the scene running "code" (lights and siren going).

As I neared the scene, both north and southbound traffic was backed up nearly a quarter of a mile. Fire and emergency medical personnel preceded me to the scene and were working to extricate the driver of a small passenger car. The crash scene was like many I had seen before. Physical evidence showed the small passenger car was traveling north and then left the roadway to the right. The driver appeared to have overcorrected and crossed into the southbound lane, colliding with a full-size SUV. Fortunately, the SUV's driver and passenger were wearing their seat belts and their air bags deployed. Both suffered only minor injuries.

The relevance of this story begins when I approached the small passenger car. Fire personnel used the Jaws-of-Life to open the driver-side door and placed the driver onto a back board. The male driver appeared conscious and alert. His head was bleeding and he had a suspected broken wrist. The driver's hair was cut short and he displayed an obvious military bearing. I immediately knelt beside his head and asked, "Are you a Soldier?" He answered with a shaken, "Yes, sir." As I spoke to him, I noticed the telltale signs of impairment (bloodshot, watery eyes; slurred speech; and a strong odor of intoxicants). I asked the Soldier how much he had to drink. Before responding, he began to sob and said, "I'm sorry, sir."

As medics continued to prepare him for transport, the Soldier repeatedly inquired if the other people were OK. I reassured him of their status, trying to provide some relief. I continued my investigation, asking the Soldier questions about the vehicle he was driving, his license status and general inquiries as to what he remembered happening. All the while I was slipping in questions about his military service.

What I found out was deeply saddening. The Soldier was a guardsman recently back from a tour in Iraq. Prior to deploying, he was cited for a violation which involved a collision in a neighboring state. The Soldier failed to respond to the minor infraction, resulting in the suspension of his license. Even upon return from Iraq, the Soldier never contacted the court to adjudicate the matter. In the meantime, the Soldier stated he had resorted to alcohol as a means to escape some personal issues.

The car he was driving belonged to his girlfriend's father. Upon talking with the owner, he stated he never gave permission for the Soldier to operate the car, which was not insured. As far as the collision details, the Soldier stated he "dozed off," resulting in the vehicle leaving the roadway. As the vehicle rolled across the rumble strips, the Soldier said he "woke up" and overcorrected. The vehicle did not have air bags, and the force of the collision resulted in a breach of the occupant area. The steering wheel was forced into his chest as the left-front part of the vehicle crumpled inward. It was clear to me that wearing a seat belt saved his life.

The Soldier admitted he had been drinking most of the day and should not have driven the car. A Portable

Breath Test indicated his blood alcohol concentration was twice the legal limit of .08. Based on all the facts, the Soldier was placed under arrest for driving under the influence, driving while license suspended and operating a motor vehicle without liability insurance. A legal blood draw was performed in the back of the ambulance. Prior to leaving, the Soldier shook my hand and said, "I'm really sorry, sir."

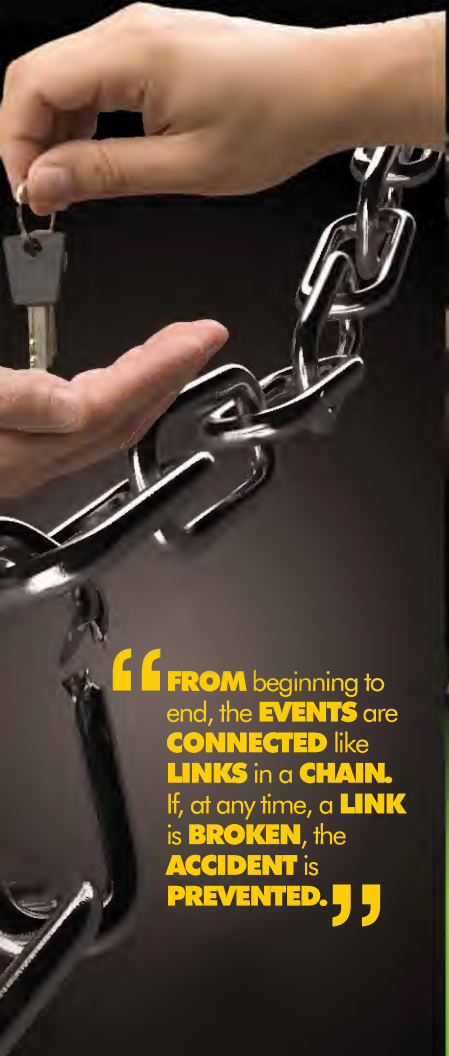
This was not the first time I had to enforce serious traffic offenses on military personnel. But for some reason, this young Soldier made a lasting impression on me. My understanding of accidents is simple. Each one is a caused occurrence — a chain of events leading to an end result. From beginning to end, the events are connected like links in a chain. If, at any time, a link is broken, the accident is prevented. Just as in this case, if any of the sequence (links) of events had been broken, this Soldier would not be facing legal and medical problems.

As a graduate of the Aviation Safety Officer Course (ASOC), I found myself applying the steps of composite risk management (CRM) to this case. What if this Soldier had identified the hazards of driving drunk? What if he'd assessed the dangers he posed to himself and other motorists? What if he'd thought about the legal trouble he'd get into driving on a suspended license in an uninsured car? If he had, maybe he wouldn't have found himself being cut out of a wreck while asking me if the people in the other car were all right.

Fortunately, no one died and the Soldier had plenty of time to do the final step of CRM — supervise and evaluate — while recovering from injuries and facing legal actions. What kind of grade do you think he gave himself?

How about you? What kind of grade will you get the next time you're drinking and thinking about getting behind the wheel? Why not avoid this Soldier's mistakes and manage the risks with CRM before they end up managing you.«

Editor's note: In addition to being a 15-year veteran with the Washington State Patrol, the author is currently on an AGR tour, assigned as a unit safety officer and C-12 pilot in the Washington Army National Guard.



"**FROM** beginning to end, the **EVENTS** are **CONNECTED** like **LINKS** in a **CHAIN.** If, at any time, a **LINK** is **BROKEN**, the **ACCIDENT** is **PREVENTED.**"

make a **movie,** save a **life.**

Peer to Peer

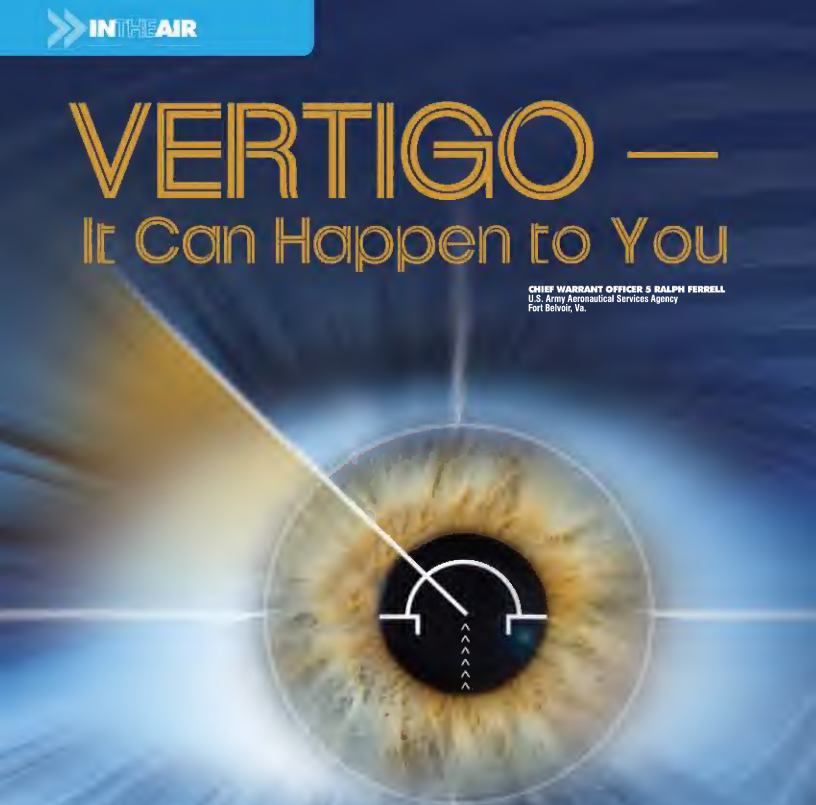
The competition runs to April 30, 2010

For more information and contest rules for Peer to Peer, go to

https://safety.army.mil/videocompetition.

VERTIGO — It Can Happen to You

CHIEF WARRANT OFFICER 5 RALPH FERRELL
U.S. Army Aeronautical Services Agency
Fort Belvoir, Va.



I've heard the vertigo stories: "It feels like you're whirling in circles or in a constant angle of bank, unable to tell the difference between up and down." I, however, had never experienced this sensation of spinning … until now.

The mission was simple. We flew from Fort Campbell, Ky., to Memphis (Tenn.) International and returned with the parts the maintenance section needed. The weather that day was gray, rainy and overcast, with ceilings at 1,500 feet and visibility varied between one and two miles. The weather was predominantly like this en route to the destination.

On the runway, I received my initial clearance for a runway heading takeoff climb to 5,000 feet. The takeoff was uneventful and upon reaching 5,000 feet, Fort Campbell departure cleared us for an initial heading change and a frequency change to Memphis Center. This was where the nightmare began.

I transferred the controls to the co-pilot so I could work the radios and told him to maintain 5,000 feet and increase his airspeed to 120 knots. Just as I looked down to tune the radios, I felt a sudden cyclic climb that pushed me down in my seat and forced my head toward the center console. This got my attention and I immediately snapped my head back up and asked what was going on. To my surprise, I heard, "Oh, wrong way," followed by another rapid cyclic input in the opposite direction. I couldn't believe what was happening. The resulting zero G force was all it took to instantly induce a severe case of vertigo in both of us. (What I didn't know until later was the co-pilot had applied excessive cyclic inputs to adjust airspeed.)

Realizing both of us had vertigo, I took the controls and immediately tried to focus on the instruments to ascertain exactly where we were in space. The rate of descent was instantly apparent as I watched the altimeter spin past 3,500 feet (well over 1,000 feet per minute). I couldn't believe it, my brain and hands were incapable of communicating, and everything I did to control the aircraft seemed to make the vertigo worse.

After what felt like minutes, I did my best to ignore the mixed signals my brain was giving me and was finally able to arrest our descent at 2,000 feet. I stopped our rate of descent, but that did not stop the vertigo sensations. As I leveled off at 2,000 feet, I stared at my instruments in hopes of regaining my sense of equilibrium, but every movement of the aircraft induced more vertigo. I just could not shake the sensation of vertigo and finally contacted Fort Campbell approach for vectors back for landing.

> "**ONE** of the most **DIFFICULT** tasks in **INSTRUMENT** flight is to **TRUST** your instruments and **IGNORE** what your **SENSES** may be **TELLING** you."

What did I learn from this event? One of the most difficult tasks in instrument flight is to trust your instruments and ignore what your senses may be telling you. I was never more mentally exhausted than after that flight and have, fortunately, never again experienced such a severe case of vertigo.«

LEADERSHIP — IT'S WHAT'S FOR SAFETY

RONALD K. LANE
Installation Safety Office
Fort Knox, Ky.

Over the years, Leaders have set the example for others to follow and decided the punishment for those who didn't. Leaders have made the standards of behavior known to those serving under them so there is no question about what is expected. Leaders set standards for how they will conduct operations, support and even their personal lives.

But in day-to-day actions, traditional Leaders can't be everywhere. And that leaves the question, "Who's really a Leader?" Everyone acknowledges those in command positions, but what about others? How about you, private? Are you a Leader? You bet!

A Leader is not just someone in a designated position, but anyone who has influence over the actions of others. If Pvt. Jones influences Pfc. Smith to wear his seat belt in his car, he's a Leader. If he tactfully lets Spc. Wilson know that what he's about to do is not the best decision and Wilson modifies his decision to do it better, Jones is a real Leader. He's got potential.

Let's examine what made Jones a safety Leader.

His squad Leader, Sgt. Davey, talks to him all the time and has become well respected by his Soldiers. Davey knows what his Soldiers like and don't like; he knows what they plan for their weekends and tells them if they're contemplating bad choices. He knows the standards for the tasks his squad has to accomplish and makes sure his Soldiers know and strictly adhere to those standards. When someone takes an (acceptable) shortcut, he makes sure they do it properly and understand taking the wrong shortcuts can end up hurting or even killing someone. Squad Leaders like Davey are perhaps the most important link in the safety chain because they are the Leaders who work directly with the most Soldiers. Jones sees Davey and emulates him.

Davey follows the directions of his platoon sergeant and platoon leader, who also must meet standards. They know they have only so much time to get a lot done. However, they also know that a task done wrong could lead to an accident that would cost them time and potentially degrade their mission capability by loss of equipment and/or manpower.

The platoon sergeant and platoon leader follow the guidance given to them by the first sergeant and company commander. They, in turn, are following guidance from the battalion commander

and command sergeant major and so on. Everyone has a Leader above them. Even the president has to live with the knowledge the American people will decide his future term in office.

Safety is by nature a top-down program with standards set by the organization's ranking Leader. That Leader lets his subordinates know what is expected by words and deeds. Notice that both words and deeds are required.

Words alone are like shooting blanks; they make a lot of noise and smoke, but do nothing to the target. Deeds are the bullets that punch holes in the target or defeat the enemy. Without the deeds that back up the words, everyone in the chain of command knows the words are only for show in case something goes wrong. They, and the Soldiers beneath them, know the passion for the program is really not there, violated standards really don't matter and even a little reporting dishonesty is OK as long as the boss looks good and has plausible deniability.

Too many people still think that safety takes a backseat to effective operations. However, good Leaders know that a safe unit is more effective in combat and training because of reduced equipment damage and fewer lost or injured Soldiers. Good Leaders make safety "real" by setting the example in their own life and work. They hold their subordinates and buddies to the standards for the task at hand and also hold them accountable for meeting them.

Good Leaders — both in designated positions of leadership and Soldiers who care enough to protect their comrades — abound in our Army. Good Leaders, regardless of rank, use safety as one of many tools to conduct more successful operations and increase mission effectiveness. Never forget — an Army safe is an Army strong!

Heading for a FALL

JAMES (AL) BROWN
G5
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

Many of us are guilty of it — trying to "hop" a ladder a few feet to the side instead of climbing down and moving it the proper way. Or maybe you've done the suicide lean — extending your body as far to the side as possible to get to a spot that's just out of reach. While you may have successfully completed these dangerous maneuvers in the past, chances are you're heading for a fall.

DID YOU KNOW?

Each year in the U.S., there are more than 164,000 emergency room-treated injuries related to ladders.

Each year, thousands of workers are injured on ladders. The three most common causes for these accidents are ladders being in poor condition, using the wrong type of ladder for the job or using the ladder improperly. A poorly designed, maintained or improperly used ladder may collapse during use and cause the Soldier or employee to fall.

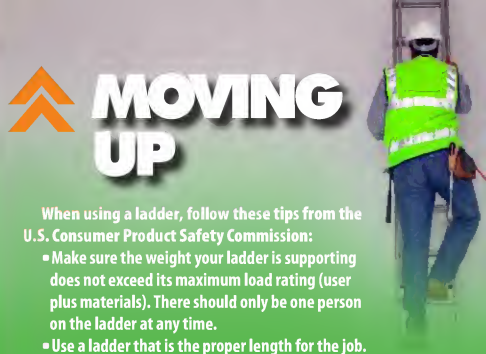
If you're working on a ladder or other elevated platform, make sure you know the requirements for using them safely. The U.S. Consumer Product Safety Commission (CPSC) offers the following information to help prevent injuries.

Types of Ladders

There are many types of ladders on the market. The first thing you must determine is how the ladder will be used. If it is intended to be portable and used by one person, it fits into one of the three basic categories: stepladder, single ladder and extension ladder.

Portable stepladders longer than 20 feet shall be equipped with a metal spreader or locking device of sufficient size and strength to securely hold the front and back sections in the open position. Single ladders longer than 30 feet and extension ladders longer than 60 feet should not be used.

Other key considerations when selecting a ladder are the duty rating, which determines how much weight it will safely support, and the type of material from which it is made. There are five different official ratings, which include your weight plus what you carry, set by the American National Safety Institute (ANSI). ANSI codes also have an established duty rating, which



MOVING UP

When using a ladder, follow these tips from the U.S. Consumer Product Safety Commission:

- **Make sure the weight your ladder is supporting does not exceed its maximum load rating (user plus materials). There should only be one person on the ladder at any time.**
- **Use a ladder that is the proper length for the job. Proper length is a minimum of 3 feet extending over the roofline or working surface. The three top rungs of a straight, single or extension ladder should not be stood on.**
- **Straight, single or extension ladders should be set up at about a 75-degree angle.**
- **All metal ladders should have slip-resistant feet.**
- **Metal ladders will conduct electricity. Use a wooden or fiberglass ladder in the vicinity of power lines or electrical equipment. Do not let a ladder made from any material contact live electric wires.**
- **Be sure all locks on extension ladders are properly engaged.**
- **The ground under the ladder should be level and firm. Large, flat, wooden boards braced under the ladder can level it on uneven or soft ground. A good practice is to have a helper hold the bottom of the ladder.**
- **Do not place a ladder in front of a door that is not locked, blocked or guarded.**
- **Keep your body centered between the rails of the ladder at all times. Do not lean too far to the side while working.**
- **Do not use a ladder for any purpose other than that for which it was intended.**
- **Do not step on the top step, bucket shelf or attempt to climb or stand on the rear section of a stepladder.**
- **Never leave a raised ladder unattended.**
- **Follow the instruction labels on ladders.**

identifies the proper portable ladder for the conditions under which it can be safely used. (For more on duty ratings, see the information graphic below.)

Ladders commonly come in three materials: aluminum, wood and fiberglass. Aluminum is the most durable; however, it will conduct electricity, making these ladders dangerous to use around electricity. A wood ladder will not conduct electricity, but it can rot. A rotted ladder is a safety hazard. Fiberglass is the best combination of durability and non-conductivity. Unfortunately, it's also the most expensive.

Proper Use of Ladders

Even a good ladder can pose a serious safety hazard when used improperly. Occupational Safety and Health Administration (OSHA) standards require the following safety precautions for ladder use:

- Ladders should be placed with a secure footing, or they should be lashed or held in position.
- Ladders used to gain access to a roof or other area should extend at least 3 feet above the point of support.
- The worker should always face the ladder when climbing up or down.
- The base of the ladder should be placed 1 foot away from the support for every 4 feet of length. This is a simple process that can actually save lives; remember that falls are the No. 1 cause of death.

Ladder Inspections

Have you ever had someone ask you for documentation of your ladder inspections?

LADDER DUTY RATINGS

TYPE:	Type IAA	Type IA	Type I
			
CAPABLE OF SUPPORTING:	375 pounds	300 pounds	250 pounds
RELATED USE:	Extra heavy duty industrial	Extra heavy duty industrial	Heavy duty industrial

FYI

If you need additional info on ladder safety, you can find it in Occupation Safety and Health Administration (OSHA) Regulation 1920 in sections 1910.25, 1910.26 or 1910.27. For more information, check out Safety and Occupational Health on the U.S. Army Combat Readiness/Safety Center Web site at https://safety.army.mil/.

Actually, a ladder inspection is not a complicated process for a person trained in what to look for. As Soldiers, we are told to keep our equipment in good condition at all times. OSHA has the same requirement when it comes to ladders. Ladders should be inspected frequently, and those with defects should be withdrawn from service for repair or destruction and marked as "Dangerous, Do Not Use." Using a damaged or faulty ladder can lead to falls. You should also only choose ladders with the Underwriter's Laboratory (UL) seal.

Whether you're cleaning gutters or finally taking down those Christmas lights, at some point, most of us will find ourselves atop a ladder. Make sure you pick the right ladder for the job and maybe someone won't have to pick you up off the ground.

Editor's note: Do you have a comment, question or article suggestion for the U.S. Army Combat Readiness/Safety Center's workplace safety team? Contact us at safe.workplace@conus.army.mil.

Type II

225 pounds
Medium duty commercial

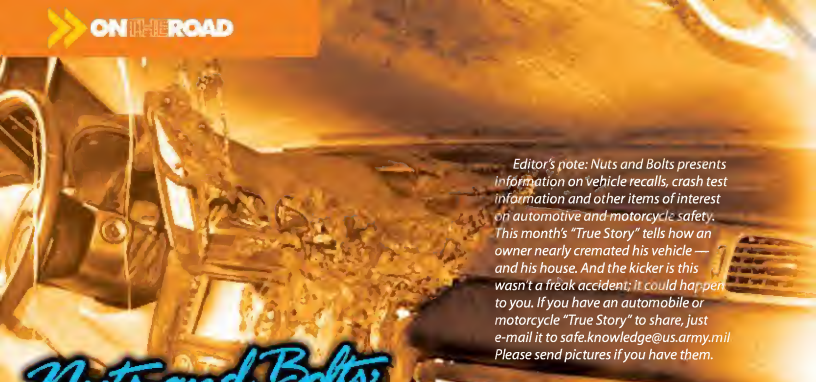
Type III

200 pounds
Light duty household

Family engagement kit

https://safety.army.mil

Army Safe is Army Strong and that starts with a Soldier's Family. Have the information to help you and your Family stay SAFE.



Editor's note: Nuts and Bolts presents information on vehicle recalls, crash test information and other items of interest on automotive and motorcycle safety. This month's "True Story" tells how an owner nearly cremated his vehicle — and his house. And the kicker is this wasn't a freak accident; it could happen to you. If you have an automobile or motorcycle "True Story" to share, just e-mail it to safe.knowledge@us.army.mil Please send pictures if you have them.

Nuts and Bolts: The Combustible Chev

True Story

COMPILED BY THE KNOWLEDGE STAFF

Think the only way you can get into trouble with a cell phone in your vehicle is talking or texting while driving? Guess again.

Anh T. Pham, chief of safety for the Air Force's 61st Air Base Wing, Los Angeles Air Force Base, points out a danger few drivers are aware of. According to Pham, an iPhone charger/docking station plugged into a Chevrolet Suburban's car outlet overheated and started a fire while the vehicle was parked in a residential garage. The owners of the vehicle were fortunate that they accidentally found the fire at 11 p.m. before going to bed and before it spread to the house.

As electronics have proliferated in our lives, it is not unusual to find multiple 12-volt receptacles in some vehicles. Pham said his personal Suburban has five outlets available, and he routinely left his cell phone and portable GPS charger/converter units plugged in. This fire and what could have been the tragic consequences made him discontinue that practice.

When leaving your vehicle unattended, ensure you unplug all charger/converter units.

How Safe is Your Ride?

Got a nice, new, shiny piece of Detroit steel parked in your driveway? How about a car with a foreign nameplate like Volvo, Mitsubishi or Nissan? Think as long as you get your periodic maintenance done your car is "bulletproof"? Well, the truth is, as good as cars are engineered today, some still roll out of the factory with problems that may not only be frustrating but, in some cases, dangerous.

Want some examples? How about Dodge's 2009-2010 Challenger and Charger or the 2009-2010 Chrysler 300? Did you know almost 13,000 of these cars were produced without having a front spindle nut installed? Imagine yourself going down the road and the wheel coming off your vehicle. Bet that would ruin your day.

However, the problems don't stop there. For example, Mitsubishi's 2008-2009 Lancer Evolution, Ralliart and turbocharged Sportback Ralliart suffer a vibration problem that could crack a fuel line and cause an engine fire. Imagine what that would be like. And there are plenty more recalls on vehicles you may have sitting in your driveway today.

But how would you know? Sure, the factories notify owners; but what if you're not the original owner? Or, what if the problem happens before the manufacturer can reach you through the mail?

There is a quicker way to find out if your vehicle may be about to take you on a ride you don't want to go on. The National Highway Traffic Safety Administration provides detailed recall information online at http://www-odi.nhtsa.dot.gov/. Look under the "Defects and Recalls" section on the Web site and click on "Search our recall database." Once you do, you'll see a tab for the "Type" of recall. Click on that tab and choose whether you want to search for recalls on vehicles, equipment, child restraints or tires.

The following tabs, "Model Year," "Make," "Model" and "Component" allow you to narrow your search to a specific vehicle. And you won't just find recent models. For those of you who drive "golden oldies," the database goes all the way back to 1966! So whether you drive a 1968 Ford Mustang GT 390 Fastback, a turbocharged Mazda RX-8 or a Nissan Quest minivan, the information to keep you and your Family safe is at your fingertips.

Accidents occurred between Nov. 1-30, 2009

AVIATION

CH-47F

CLASS E

- The crew was slingloading ammunition weighing about 7,000 pounds. During departure, with the hooks in the ARM position, the center hook inadvertently opened, followed by cautions from the warning panel. No crewmember released the load, which fell to the ground. Ground personnel recovered the slings and reported no damage to the load. Postflight found the winch control grip had failed. *Late report*

OH-58D(R)

CLASS A

- The crew had departed in a flight of two to conduct a range test fire when one of the aircraft crashed, resulting in the deaths of the two crewmembers.

UAS

MQ-1B

CLASS A

- The aircraft operator was flying the system back to the airfield when the stability augmentation system disengaged during descent. The unmanned aircraft (UA) entered a flat inverted spin and crashed, destroying the system.

RQ-7B

CLASS C

- The UA experienced a generator failure during flight at 12,000 feet mean sea level, resulting in the loss of control, and crashed.

GROUND

ACV

CLASS A

- A Soldier was killed in a Mine Resistant Ambush Protected vehicle rollover accident. The Soldier was serving as the gunner when the vehicle overturned into a wadi, pinning him underneath. The driver and a passenger received minor injuries.

Other

CLASS A

- A Sailor was fatally injured when the nontactical government vehicle he was riding in was struck head-on by an Army-leased nontactical vehicle driven by an Army contractor. At the time of the collision, the contractor was attempting to pass a convoy. Both drivers suffered unreported injuries.

Personnel Injury

CLASS A

- A Soldier was snorkeling in shallow water when Family members lost sight of her. When her spouse recovered her body, she was unresponsive. The Soldier was pronounced dead at the local hospital.

- Two Soldiers drowned while attempting to recover a container that slid into a river during a drop mission. The first Soldier went into the water to recover the container and

ATTACK	0/0
RECON	1/2
UTILITY	2/1
CARGO	1/0
TRAINING	0/0
FIXED-WING	1/0
UAS	2/0
TOTAL	7/3

AMV	5/3
ACV	2/2
PERSONNEL INJURY includes weapons-handling accidents	8/9
FIRE/ EXPLOSIVE	0/0
PROPERTY DAMAGE	0/0
TOTAL	15/14

was caught in the current. The second Soldier drowned while trying to save the other Soldier.

DRIVING

POV

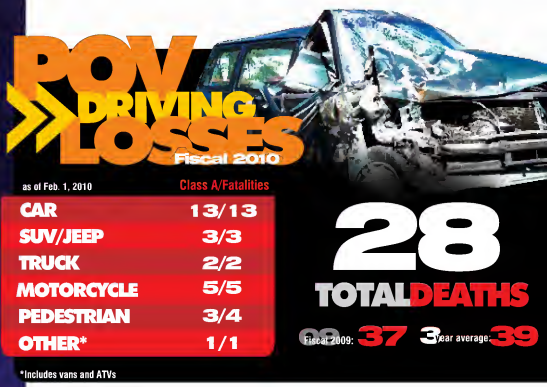
CLASS A

- A Soldier was riding in the front seat of his privately owned vehicle (POV) when his wife turned left in front of an approaching vehicle. The vehicle struck the passenger side of the Soldier's POV, fatally injuring him.
- A Soldier was driving his POV when he lost control, crossed the opposing lane, struck another vehicle and pushed it into a rock wall. The Soldier was fatally injured.
- Three foreign military student officers were returning when their vehicle drifted off the shoulder of the road and struck a dump truck. The impact fatally injured the foreign officer riding in the backseat.
- A Soldier was driving his POV when he lost control, clipped a POV in the lane to his right and then stuck an oncoming van. The van then collided with the car that had been clipped, killing a Soldier riding in the backseat.

ATV

CLASS A

- A Soldier was riding as a passenger on an all-terrain vehicle (ATV) when the operator failed to negotiate a turn, throwing the Soldier off the ATV. The Soldier was not wearing a helmet and suffered fatal injuries.



WHAT DO YOU THINK?

Through the end of March, **KNOWLEDGE** magazine is conducting a survey to determine whether we're meeting our readers' needs. Please help us out by taking a couple of minutes to answer a few simple questions at https://safety.army.mil/.

After all, this is YOUR magazine. Shouldn't it contain the information you find helpful?


FACT: Army motor and combat vehicle accidents are the single greatest cause of on-duty accidental ground fatalities among our Soldiers.
Get the tools before the road gets rough.
Driver's Training Toolbox
https://safety.army.mil/drivertrainingtoolbox/
U.S. ARMY
ARMY STRONG.
U.S. ARMY COMBAT READINESS/SAFETY CENTER
ARMY SAFE IS ARMY STRONG
A BAND OF BROTHERS & SISTERS